

REMARKS/ARGUMENTS

Claim Amendments

The Applicant has amended claims 31 and 33. Claim 45 has been added. Applicant respectfully submits no new matter has been added. Accordingly, claims 24-28, 31-37, and 40-45 are pending in the application. Favorable reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

Claim Rejections – 35 U.S.C. § 102(b)

Claims 29-32 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Number 6,275,708 issued to Lahtinen (hereinafter referred to as "Lahtinen"). While not conceding that the cited reference qualifies as prior art, but instead to expedite prosecution, Applicant has chosen to respectfully disagree and traverse the rejection as follows. Applicant reserves the right, for example, in a continuing application, to establish that the cited reference, or other references cited now or hereafter, do not qualify as prior art as to an invention embodiment previously, currently, or subsequently claimed.

Applicant respectfully submits that Claims 29-32 are patentable over Lahtinen because the cited passages of the cited reference do not disclose each and every element of amended independent Claim 31. For example, the cited passages of Lahtinen do not disclose "wherein the respective maximum number which is allowed for the location area is defined for paging transactions of each of the kind comprising Call Control transactions, Supplementary Service transactions, Short Message Service transactions and Location Services transactions, respectively, the checking step being performed for each kind of transaction," as recited in amended independent Claim 31. Independent Claim 33 also recites a substantially similar element. Page 6 of the Final Office Action mailed February 16, 2010 (hereinafter referred to as "Final Office Action") cites col. 3, lines 16-24 of Lahtinen as support for the rejection. Col. 3, lines 16-24 of Lahtinen discusses:

The invention is described below with reference to call limiting in a single mobile services switching centre. It is advantageous to limit the calls of a

mobile services switching centre MSC especially when updating the mobile station MS location information stored in the visitor location register VLR by inquiries directed to the mobile stations. The method of the invention can also be applied to limiting calls that pass via a given base station subsystem BSS.

In other words, the cited passage of Lahtinen discusses a general description of why limiting calls that pass via a given BSS is advantageous, especially when updating MS location information. However, nothing in the cited passage of Lahtinen discloses, teaches, or even suggests defining a maximum number of each kind of paging transaction comprising "Call Control transactions, Supplementary Service transactions, Short Message Service transactions and Location Services transactions," as recited in the amended independent claims because Lahtinen is concerned with limiting call service to reduce overloading the system, but is silent on how to handle (e.g., prioritize) other types of signaling services as recited in the independent claims. In fact, page 3 of the present Specification indicates how these other signaling services are not adequately controlled and can affect network congestion.

Since the cited paragraph of Lahtinen does not disclose each and every element of the amended independent claim, independent Claims 31 and 33 and all claims dependent therefrom are patentable over Lahtinen. Applicant thus respectfully requests that the rejection be withdrawn and a notice of allowance be issued.

Claim Rejections – 35 U.S.C. § 103 (a)

Claims 24, 34, and 36-37 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lahtinen in view of GB 2350918 (hereinafter referred to as "Joensuu") and U.S. Patent Application No. 20020171581 (hereinafter referred to as "Sheynblat"). Joensuu and Sheynblat are not cited as disclosing, teaching, or suggesting any of the elements of independent claims 31 and 33. Thus, claims 24, 34, and 36-37 are patentable over Lahtinen, Joensuu, and Sheynblat, taken alone or in any permissible combination, at least because of the dependence of claim 24 on independent claim 31 and the dependent of claim 34 and 36-37 on independent claim 33. Applicant therefore respectfully requests that the rejection be withdrawn.

Claims 25-28 and 35 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Lahtinen, Joensuu, and Sheynblat, and further in view of U.S. Patent Application No. 20060128395 (hereinafter referred to as "Muhonen"). Joensuu, Sheynblat, and Muhonen are not cited as disclosing, teaching, or suggesting any of the elements of independent claims 31 and 33. Thus, claims 25-28 and 35 are patentable over Lahtinen, Joensuu, Sheynblat, and Muhonen, taken alone or in any permissible combination, at least because of the dependence of claims 25-28 on independent claim 31 and the dependent on claim 35 on independent claim 33. Applicant therefore respectfully requests that the rejection be withdrawn.

Claims 33, 38, and 40-44 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lahtinen. As an initial matter, Claim 38 has been cancelled, thus rendering the rejection with regard to that claim moot. Applicant respectfully submits that Claims 33 and 40-44 are patentable over Lahtinen because the cited passages of the cited reference do not disclose each and every element of amended independent Claim 33. For example, the cited passages of Lahtinen fail to disclose, teach, or even suggest "at least one counter indicative of the number of ongoing transactions, the at least one counter being incremented when a paging request is accepted for processing by the control node and being decremented when a paging response has been returned by the mobile station," as recited in independent Claim 33. The cited passages of Lahtinen fail to disclose, teach, or even suggest at least that element of independent Claim 33 because Lahtinen's call counter increments or decrements in response to two different events: (1) a call is initiated or (2) a call timer expires. See, e.g., col. 3, lines 25-39 and col. 4, lines 17-46 of Lahtinen. Incrementing or decrementing a call counter in response to the expiration of a call timer does not involve any sort of active interaction by the mobile station. In stark contrast, "at least one counter indicative of the number of ongoing transactions, the at least one counter being incremented when a paging request is accepted for processing by the control node and being decremented when a paging response has been returned by the mobile station," as recited in independent Claim 33 clearly indicates that the mobile station has returned a paging response, which is an active interaction by the mobile station. Thus, Lahtinen fails to disclose, teach, or suggest the elements of Independent Claim 33. Independent Claim

33 and all claims dependent therefrom are patentable over Lahtinen. Applicant respectfully request that the rejection be withdrawn.

New Claim

Applicant has added new claim 45. Applicant respectfully submits that new claim 45 is patentable because nothing in the cited passages of Lahtinen discloses “wherein the updating step further comprises the step of incrementing at least one counter indicative of the number of ongoing transactions which is comprised in the control node when a paging request is accepted for processing by the control node, and the step of decrementing the at least one counter when a paging response is returned by the mobile station,” as recited in new claim 45. In the Final Office Action and the Advisory Action mailed June 1, 2010 (hereinafter “Advisory Action”), various passages of Lahtinen are cited as support for maintaining the rejection. For example, the Advisory Action refers to col. 3, lines 25-39 and col. 4, lines 17-46 of Lahtinen. Col. 3, lines 25-39 of Lahtinen discusses:

In the method of the invention the number of calls to be initiated is counted. The number of calls N_{max} to be initiated during a predetermined time interval T_i under study, measured by means of a call-specific timer is limited (N_{max} / T_{int}). The number N_{max} of allowed calls is preferably set to a smaller value than the system call load processing capacity, also allowing for other signaling or a decrease in system performance. The time interval T_{int} under study and the number of calls N_{max} to be initiated can be set by an operator and can be set e.g. separately for each mobile services switching centre MSC. The processing capacity is determined by the weakest unit of the network as regards call load, e.g. the base station subsystem BSS, the calling channel of a single base station BTS, or exceptionally, the mobile services switching centre MSC.

In other words, the cited passage of Lahtinen counts the number of calls to be initiated during a predetermined time interval, which is measured by a call-specific timer. The number of calls and time interval can be set separately for each MSC. Col. 4, lines 17-46 discusses:

The time interval chosen to be studied is measured with a call-specific timer which has not been in use, i.e. a new call counter is chosen for each call to be initiated. In step 25 the call counter is initialised using the value T_{int} of the time interval under study and in step 26 the call and

the corresponding call timer are initiated. Time measurement of call timers in operation is monitored (step 28). When the time under study to be measured is terminated in a call counter, a call step, in this case 1, is added to the value of the call counter (step 29).

Once the call counter reaches a present threshold value, 0, in FIG. 3, the party requesting the call is notified that the call cannot be initiated (step 27). Using the GSM system as an example, this notification can be effected by a "No Paging Response" message. New calls cannot be initiated until the time interval under study is terminated in one of the call timers and the value of the call counter has been increased so as to exceed the threshold value.

The operation of the embodiment of FIG. 3 can be illustrated by the following example. The numerical values used in the example have been chosen merely to clarify the idea of the invention. If the initial value N_{\max} of the call counter is initialized e.g., to the value of 50 and the time interval T_{int} under study is set to 1 s, 50 calls per second are allowed to be initiated in the mobile services switching centre. Each initiated call decreases the call counter value by one. During one second after the first call request a total of 50 calls can be initiated. Should a 51st call request be made during this second, initiation of a new call is prevented and termination of the time interval under study of the first call is awaited.

In other words, Lahtinen's call counter increments or decrements in response to two different events: (1) a call is initiated or (2) a call timer expires. Nothing in the cited passage of Lahtinen discloses "wherein the updating step further comprises the step of incrementing at least one counter indicative of the number of ongoing transactions which is comprised in the control node when a paging request is accepted for processing by the control node, and the step of decrementing the at least one counter when a paging response is returned by the mobile station," as recited in new claim 45 because "the step of decrementing the at least one counter" of claim 45 is performed when the mobile station actively responds to the paging request ("when a paging response is returned by the mobile station"). In stark contrast, the cited passages of Lahtinen merely discusses changing the call counter in response to the expiration of a call timer, which does not involve any sort of affirmative or active response by anything, much less a "mobile station" as recited by new claim 45. Thus, Lahtinen's expiration of the timer cannot (and should not) be fairly analogized to the active response of a mobile station as disclosed in new claim 45. Claim 45 should therefore be patentable over Lahtinen.

Also, Joensuu, Sheynblat, Muhonen, taken alone or in any permissible combination, also do not disclose, teach, or suggest the elements of new claim 45. Thus, Claim 45 is patentable over Lahtinen, Joensuu, Sheynblat, and Muhonen, taken alone or in any permissible combination.

CONCLUSION

In view of the foregoing remarks, the Applicant believes all of the claims currently pending in the Application to be in a condition for allowance. The Applicant, therefore, respectfully requests that the Examiner withdraw all rejections and issue a Notice of Allowance for all pending claims.

The Applicant requests a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,

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